

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

By this Amendment, claims 17-19, 21-22, 24-27, and 29-30 are amended to better define the claimed invention; claim 23 is canceled without prejudice or disclaimer; and claims 33-37 are added to provide the scope of protection to which the Applicants are believed entitled. Further, the specification is amended, and new drawings FIGs. 10 and 11 are added. Support for the amendments can be found at least from the original specification and claims. Claims 17-22 and 24-37 remain pending in the application.

The drawings are objected to for failing to show every claimed feature. In response, new drawings FIGs. 10 and 11 are added to overcome this objection. Support for the drawings can be found at least from the original specification and claims. Reconsideration and withdrawal of this objection is respectfully solicited.

Claims 17-18 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement and under § 112, second paragraph, as being indefinite. In response, claims 17 and 18 are amended to avoid invoking § 112, sixth paragraph. Further, Applicants respectfully submit that, in the background section of the present application, the Applicants have explained in detail the relevant technology, such as Terrain Awareness Warning System (TAWS) and Collision Prediction and Alerting (CPA). It is submitted that a person of ordinary skill in the art of TAWS, in light of the present specification, would be enabled to make and use what have been defined by the claims of the present application. Reconsideration and withdrawal of these rejections under § 112, first paragraph and second paragraph, is respectfully solicited.

Claims 19 and 22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In response, claims 19 and 22 are amended to ensure proper antecedent basis. Reconsideration and withdrawal of this rejections under § 112, second paragraph, is respectfully solicited.

Claims 17-20 and 25-32 are rejected under 35 U.S.C. § 102(b) as being anticipated by Meunier (US 6,480,120). Applicants respectfully traverse this rejection.

Independent claim 17 is amended to recite, among other things, a first safety surface or profile “bounded laterally by a first left limit and a first right limit” and a second safety surface or profile “bounded laterally by a second left limit and a second right limit.” Applicants respectfully submit that Meunier fail to disclose at least these features recited in independent claim 17.

More specifically, Meunier discloses an airborne terrain collision prevention device having two lateral limit paths on two sides of the vertical plane of the flight path. See Abstract, col. 9, ln. 39-55, and FIGs. 7-8 of Meunier. Contrary to the features recited in claim 17, which would result in four limits being established by the first and second trajectory prediction units, the device disclosed in Meunier can only establish two lateral limit paths.

To establish a prima facie rejection under § 102(b), the applied reference must disclose each and every claimed element. Applicants respectfully submit that Meunier fails to disclose all the claimed features at least for the reasons presented above. Therefore, amended independent claim 17 is deemed patentable over Meunier. Claims 18-20 and 25-32 are likewise patentable for their dependencies on independent claim 17. Withdrawal of the rejection of claims 17-20 and 25-32 under § 102(b) is respectfully solicited.

Claims 21-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Meunier in view of Applicants’ background of the invention. Applicants respectfully traverse this rejection at least for the following reasons.

Amended Independent claim 17 recites, among other things, “an alarm unit linked to said information processing apparatus and configured to establish at least a first alarm as a function of the results of the first comparison and a second alarm as a function of the results of the second comparison, the second alarm being generated

when the second risk of collision cannot be avoided by a simple vertical avoidance maneuver.” Applicants respectfully submit that Meunier and the background section of the present application, either alone or in combination, fail to disclose or suggest at least the above-mentioned feature.

More specifically, the device recited in amended independent claim 17 establishes a first safety surface or profile and a second safety surface or profile, and establishes at least an alarm based on the comparison of the first safety surface or profile and the second safety surface or profile with a first or a second topographic surfaces. However, Meunier’s device generates only one set of limits based on a defined VRP with regard to the terrain, and then it generates an alarm based on comparing the set of limits and two time instants: VRP minus 20 seconds and VRP minus 5 seconds. See col. 6, ln. 43-61 and FIGs. 10. Nowhere does Meunier disclose or suggest establishing an alarm by comparing a single safety surface or profile (the recited second safety surface or profile) with a topographic surface, and the alarm being generated when a risk of collision cannot be avoided by a simple vertical avoidance maneuver.

Furthermore, Applicants respectfully submit that the background section of the present application fails to disclose or suggest this feature as well.

Therefore, Meunier and the background section of the present application would not have made the claimed invention recited in independent claim 17 obvious. Claims 21-22 and 24 are likewise patentable for their dependencies on independent claim 17. Cancellation of claim 23 renders the rejection of this claim moot. Withdrawal of the rejection of claims 21-24 under § 103(a) is respectfully solicited.

Claims 33 and 34 are added to depend from independent claim 17, and thus are likewise patentable for their dependencies on claim 17. Claims 35-37 are added to recite a method comprising, among other things, generating a second alarm “when the second risk of collision cannot be avoided by a simple vertical avoidance maneuver.”

Based on the reasons presented above for independent claim 17, claims 35-37 are believed also in condition for allowance.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited. Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicants' attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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